

## REMARKS

Claims 1-14 and 23-28 are pending. The Examiner's reconsideration of the rejections in view of the amendments and remarks is respectfully requested.

Claims 1-3, 13 and 14 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Doeringer et al. (USPN 5,361,256) in view of Cheng (USPN 6,600,724) and further in view of Colie et al. (USPN 6,061,349). The Examiner stated essentially that the combined teachings of Doeringer, Cheng and Colie teach or suggest all the limitations of claims 1-3, 13 and 14.

Claims 1 and 14 have been amended to include the limitations of claim 4, rejected under 35 U.S.C. 103(a) as being unpatentable over Doeringer in view of Cheng and further in view of Colie as applied to claim 1, and further in view of Annapareddy et al. (USPN 5,602,839) (see below).

Claims 1 and 14 claim, *inter alia*, “wherein the multicast distribution of the message is along links and further comprises the step of routing the message through the selected spanning tree according to precomputed cellule distribution tables associated with the each virtual machine, wherein each cellule distribution table includes a first distribution set of cellules to be used if the message is received from a neighbor in the same cell and a second distribution set of cellules to be used if the message is received from a neighbor in another cell.”

Doeringer teaches a method for multicast routing, and sending a multicast packet to a subnetwork (see col. 10, line 20 to col. 11, line 3). Doeringer does not teach “wherein each cellule distribution table includes a first distribution set of cellules to be used if the message is received from a neighbor in the same cell and a second distribution set of cellules to be used if the message is received from a neighbor in another cell” as claimed in claims 1 and 14 (Emphasis Added). Doeringer teaches that multicast packets are sent to gateways with a

destination field and a target subnetwork field (see col. 10, lines 30-34). Doeringer performs messaging based on destinations and targets. Doeringer does not teach using different tables based on where a message is received from, essentially as claimed in claims 1 and 14. Therefore, Doeringer fails to teach “wherein each cellule distribution table includes a first distribution set of cellules to be used if the message is received from a neighbor in the same cell and a second distribution set of cellules to be used if the message is received from a neighbor in another cell”, essentially as claimed in claims 1 and 14. Therefore, Doeringer fails to teach all the limitations of claims 1 and 14.

Cheng teaches a routing scheme for a shortest path tree architecture (see Abstract). Cheng does not teach or suggest “wherein each cellule distribution table includes a first distribution set of cellules to be used if the message is received from a neighbor in the same cell and a second distribution set of cellules to be used if the message is received from a neighbor in another cell” as claimed in claims 1 and 14. Cheng’s routing scheme consults an address table to determine a destination node (see col. 6, lines 61-65). Thus, Cheng is concerned with the location of a destination. Cheng does not route a message based on a node from which a message is received, much less, teach or suggest using different tables based on where a message is received from, essentially as claimed in claims 1 and 14. Therefore, Cheng fails to teach or suggest “wherein each cellule distribution table includes a first distribution set of cellules to be used if the message is received from a neighbor in the same cell and a second distribution set of cellules to be used if the message is received from a neighbor in another cell” as claimed in claims 1 and 14. Thus, Cheng fails to cure the deficiencies of Doeringer.

Coile teaches a system and method for handling a plurality of connection requests made for a plurality of virtual machines implemented on a single physical machine (see col. 2, lines

36-43). Coile does not teach or suggest “wherein each cellule distribution table includes a first distribution set of cellules to be used if the message is received from a neighbor in the same cell and a second distribution set of cellules to be used if the message is received from a neighbor in another cell” as claimed in claims 1 and 14. Coile teaches a system for IP communications, wherein each destination has an IP address (see Abstract). Coile teaches that routing of communications is performed according to an IP address of the destination. Thus, Coile does not teach or suggest using different tables based on where a message is received from, essentially as claimed in claims 1 and 14. Coile does not teach or suggest “wherein each cellule distribution table includes a first distribution set of cellules to be used if the message is received from a neighbor in the same cell and a second distribution set of cellules to be used if the message is received from a neighbor in another cell” as claimed in claims 1 and 14. Thus, Coile fails to cure the deficiencies of Doeringer and Cheng. Indeed, as indicated in the Final Office Action, Doeringer in view of Cheng in further view of Coile does not expressly disclose that each cellule distribution table includes a first distribution set of cellules to be used if the message is received from a neighbor in the same cell and a second distribution set of cellules to be used if the message is received from a neighbor in another cell (see page 5, lines 2-5).

Annapareddy teaches a message routing system having two-level multi-path routing tables at each node (see Abstract). Annapareddy does not teach “wherein each cellule distribution table includes a first distribution set of cellules to be used if the message is received from a neighbor in the same cell and a second distribution set of cellules to be used if the message is received from a neighbor in another cell” as claimed in claims 1 and 14. Annapareddy tables are selected according to a location of a group or node to which a message is to be sent (see col. 3, lines 12-30). Annapareddy does not teach using different tables based on where a message is received

from, essentially as claimed in claims 1 and 14. Therefore, Annapareddy fails to cure the deficiencies of Doeringer, Cheng and Coile.

It is respectfully submitted that the combined teachings of Doeringer, Cheng, Coile and Annapareddy fail to teach or suggest “wherein each cellule distribution table includes a first distribution set of cellules to be used if the message is received from a neighbor in the same cell and a second distribution set of cellules to be used if the message is received from a neighbor in another cell” as claimed in claims 1 and 14.

Claim 2, 3 and 13 depends from claim 1. The dependent claim is believed to be allowable for at least the reasons given for claim 1. The Examiner’s reconsideration of the rejection is respectfully requested.

Claims 4-12 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Doeringer in view of Cheng and further in view of Colie as applied to claim 1, and further in view of Annapareddy et al. (USPN 5,602,839). The Examiner stated essentially that the combined teachings of Doeringer, Cheng, Coile and Annapareddy teach or suggest all the limitations of claims 4-12.

Claims 5-12 depend from claim 1. Claim 4 has been cancelled. Claims 5-12 are believed to be allowable for at least the reasons given for claim 1.

Claims 23, 25 and 28 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Doeringer in view of Cheng. The Examiner stated essentially that the combined teachings of Doeringer and Cheng teach or suggest all the limitations of claims 23, 25 and 28.

Claim 23 claims “determining, by the first subscribing client, whether the publishing client is an external neighbor outside a first cell of the first subscribing client or an internal neighbor inside the first cell of the first subscribing client.”

Doeringer teaches a method for multicast routing, and sending a multicast packet to a subnetwork (see col. 10, line 20 to col. 11, line 3). Doeringer does not teach “determining, by the first subscribing client, whether the publishing client is an external neighbor outside a first cell of the first subscribing client or an internal neighbor inside the first cell of the first subscribing client” as claimed in claim 23. Doeringer teaches that multicast packets are sent to gateways with a destination field and a target subnetwork field (see col. 10, lines 30-34). Doeringer performs messaging based on destinations and targets. Doeringer does not teach a subscribing client determining a location of a publishing client, essentially as claimed in claim 23. Therefore, Doeringer fails to teach “determining, by the first subscribing client, whether the publishing client is an external neighbor outside a first cell of the first subscribing client or an internal neighbor inside the first cell of the first subscribing client”, essentially as claimed in claim 23. Therefore, Doeringer fails to teach all the limitations of claim 23.

Cheng teaches a routing scheme for a shortest path tree architecture (see Abstract). Cheng does not teach or suggest “determining, by the first subscribing client, whether the publishing client is an external neighbor outside a first cell of the first subscribing client or an internal neighbor inside the first cell of the first subscribing client”, essentially as claimed in claim 23. Cheng’s routing scheme consults an address table to determine a destination node (see col. 6, lines 61-65). Cheng teaches routing according to a location of a destination. Cheng fails to teach or suggest “determining, by the first subscribing client, whether the publishing client is an external neighbor outside a first cell of the first subscribing client or an internal neighbor inside the first cell of the first subscribing client”, essentially as claimed in claim 23. Thus, Cheng fails to cure the deficiencies of Doeringer.

The combined teachings of Doeringer and Cheng teach methods for determining where to

route a message or packet according to a destination. However, the combined teachings of Doeringer and Cheng fail to teach a determination of a location of a publishing client, e.g., where a message has come from. Therefore, claim 23 is believed to be allowable in view of Doeringer and Cheng. Claims 25 and 28 depend from claim 23 and are believed to be allowable for at least the reasons given for claim 23.

Claims 24, 26 and 27 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Doeringer in view of Cheng as applied to claim 23, and further in view of Colie. The Examiner stated essentially that the combined teachings of Doeringer, Cheng and Colie teach or suggest all the limitations of claims 24, 26 and 27.

Claims 24, 26 and 27 depend from claim 23. The dependent claims are believed to be allowable for at least the reasons given for claim 23. The Examiner's reconsideration of the rejection is respectfully requested.

For the forgoing reasons, the application, including claims 1-3, 5-14 and 23-28, is believed to be in condition for allowance. Early and favorable reconsideration of the case is respectfully requested.

Respectfully submitted,



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